

# **Chapter IV**

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## **ALTERNATIVES**

### **1. Introduction**

This May 2004 Draft EIR evaluated three project alternatives in this section:

- No Project Alternative
- Alternative Fuels Alternative
- Reduced Service Alternative

This revised Draft EIR includes a new Business Plan Project Alternative that effectively embodies the original Reduced Service Alternative as set forth in the first Draft EIR. The Business Plan Project Alternative is evaluated throughout this revised Draft EIR in a full level of detail alongside the Original Project. Therefore, the Reduced Service Alternative has been removed from this section, as it has been superseded by the Business Plan Project Alternative.

### **2. Basis for Developing Alternatives**

CEQA Section 15126.6(a) requires that an EIR include reasonable alternatives to a proposed project in order to assess whether any alternatives would result in fewer significant impacts while allowing most of the basic objectives of the project to be met (see Section II.C for a description of the Santa Cruz Recreational Rail Service Project objectives). The alternatives provide a basis of comparison for the proposed project in order to foster informed decision-making.

CEQA also requires that all alternatives analyzed in an EIR must be potentially feasible (CEQA Section 15126(d)(1)). Among the factors that must be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, and jurisdictional boundaries.

In accordance with CEQA, two alternatives in addition to the Business Plan Project Alternative have been developed for the Santa Cruz Recreational Rail Service Project that could avoid or substantially lessen any significant impacts of the project. These two alternatives are summarized below.

- *No Project (Alternative 1)*: CEQA 15126.6(e) requires that a No Project Alternative be evaluated. Under the No Project Alternative, the project site would remain in its current condition for the duration of this analysis period. The No Project Alternative is discussed in Section C.1 of this chapter.
- *Alternative Fuel (Alternative 2)*: Under this alternative, the same Federal Railroad Administration-compliant vehicles would be operated, but the vehicles would be retrofitted to run on alternative fuel (e.g., water-diesel-emulsified fuel, biodiesel fuel, ethanol-diesel-emulsified fuels, Fisher-Tropsch fuel, and/or other fuels resulting in reduced environmental impact) rather than diesel. The Alternative

Fuel Alternative is discussed in Section C.2 of this chapter. Although this alternative is framed as an alternative to the Original Project, SCCRTC has the ability to approve a hybrid alternative consisting of the Business Plan Alternative and the Alternative Fuel Alternative. This Revised DEIR could support such a choice since the analysis herein reveals all of the environmental impacts that would result from such a hybrid choice. (See *Village Laguna of Laguna Beach v. Board of Supervisors* (1982) 134 Cal.App.3d 1022, 1029 (“[i]t is not . . . unreasonable to conclude that an alternative not discussed in an EIR could be intelligently considered by studying the adequate descriptions of the plans that are discussed”).)

The evaluation of the alternatives uses the same environmental analysis methodology as the analysis of the proposed project. Environmental issue areas such as noise, traffic and air quality are evaluated to determine whether the alternative would result in a greater or lesser impact than the proposed project. The evaluation of the alternatives is quantitative with respect to those issues for which quantitative analysis is possible and meaningful, but is qualitative for some issue areas.

In addition to the alternatives listed above, several alternatives were considered in the Intra-County Recreational Rail Options Preliminary Analysis, prepared in March 2003 (Preliminary Analysis). These alternatives are summarized below.

- *Santa Cruz - Davenport Route:* This alternative involved dinner train service between Santa Cruz and Davenport. However, the preliminary economic analysis for this alternative concluded that further study was required to determine whether the option was financially viable. For this type of service, it is assumed that, like the Big Trees and Roaring Camps trains, the main source of patrons are day visitors from outside of Santa Cruz, and it is unclear whether day visitors would choose to extend their stay to include a dinner excursion. No further environmental review of this alternative was conducted.
- *Santa Cruz – Junction of Highway 1/9 Route:* This alternative involved a different route than the proposed project. A preliminary economic analysis prepared for this alternative concluded that further study was required to determine whether visitors would utilize the remote parking included in this alternative. The economics of this option as presented in the Preliminary Analysis appear marginal, and no further environmental review of this alternative was conducted.
- *Santa Cruz – Capitola Route:* This alternative involved a different route than the proposed project. A preliminary economic analysis prepared for this alternative concluded that further study was required to determine whether a market exists for a recreational rail service between Santa Cruz and Capitola since they serve distinct markets. No further environmental review of this alternative was conducted.
- *Jade Street Station/Platform:* This alternative was an option to the Cliff Drive Station/Platform. The Jade Street Platform was proposed to be located at the most westerly end of the recreational rail service. It would have provided a convenient terminus for the rail service and would allow access to Capitola’s Jade Street Park facilities and community center. Cliff Drive was chosen because it is more visible next to public parking and would not conflict with the heavily used year-round activities at the Jade Street Center. No further environmental review of this alternative was conducted.

## 2. Comparison of Impacts between the Proposed Project and its Alternatives

Table IV.1 contains a comparison of the potentially significant impacts related to the proposed Santa Cruz Recreational Rail Service and its identified alternatives. The potentially significant impacts associated with the proposed project are discussed in Chapter III *Environmental Setting, Impacts and Mitigation*, and are also discussed in the Initial Study prepared for the project, located in Appendix A of this EIR. The potential impacts associated with the alternatives are discussed in Section C of this chapter.

<b>Table IV.1 Comparison of Potentially Significant Impacts between Proposed Project and Alternatives</b>				
<b>Topic/Impact</b>	<b>Proposed Project</b>	<b>Alternative 1 No Project</b>	<b>Alternative 2 Alternative Fuel</b>	<b>Business Plan Project Alternative</b>
<b>Air Quality</b>				
Potential to increase criteria pollutants	Less than significant	No impact but does not meet project objectives	Less than significant	Less than significant
Potential to expose sensitive receptors to substantial pollutant concentrations	Less than significant	No impact but does not meet project objectives	Less than significant	Less than significant
Potential to create objectionable odors	Less than significant	No impact but does not meet project objectives	Less than significant	Less than significant
<b>Hazards and Hazardous Materials</b>				
Potential to create hazard through transport, use or disposal of hazardous materials	Less Than Significant	No impact but does not meet project objectives	Less Than Significant	Less Than Significant
<b>Noise</b>				
Noise levels in excess of applicable standards.	Mitigated to a less-than-significant level	No impact but does not meet project objectives	Mitigated to a less-than-significant level	Mitigated to a less-than-significant level
Excessive vibration or ground borne noise levels.	Less than significant	No impact but does not meet project objectives	Less than significant	Less than significant

**Table IV.1 Comparison of Potentially Significant Impacts between Proposed Project and Alternatives**

Topic/Impact	Proposed Project	Alternative 1 No Project	Alternative 2 Alternative Fuel	Business Plan Project Alternative
Increase in ambient noise levels.	With implementation of a quiet zone this impact would be mitigated to a less than significant. Otherwise, it would remain significant and unavoidable	No impact but does not meet project objectives	With implementation of a quiet zone this impact would be mitigated to a less than significant. Otherwise, it would remain significant and unavoidable	With implementation of a quiet zone this impact would be mitigated to a less than significant. Otherwise, it would remain significant and unavoidable
<b><i>Transportation and Circulation</i></b>				
Substantial increase in traffic	Less than significant	No impact but does not meet project objectives	Less than significant	Less than significant
Exceedance of level of service standard (individually)	Less than significant	No impact but does not meet project objectives	Less than significant	Less than significant
Inadequate emergency access	Less than significant	No impact but does not meet project objectives	Less than significant	Less than significant
Inadequate parking capacity	Less than significant	No impact but does not meet project objectives	Less than significant	Less than significant
<b><i>Cumulative Impacts</i></b>				
<i>Traffic and Safety</i>	With implementation of mitigation measure E-1 this impact would be mitigated to a less than significant. Otherwise, it would remain significant and unavoidable	No impact but does not meet project objectives	With implementation of mitigation measure E-1 this impact would be mitigated to a less than significant. Otherwise, it would remain significant and unavoidable	With implementation of mitigation measure E-1 this impact would be mitigated to a less than significant. Otherwise, it would remain significant and unavoidable
<i>All other topic areas</i>	Less than significant	No impact	Less than significant	Less than significant

## C. Discussion of Alternatives

This section includes a discussion of the two project Alternatives: The No Project Alternative, the Alternative Fuels Alternative.

### 1. Alternative 1 – No Project Alternative

#### Purpose and Description

CEQA requires the evaluation of the No Project Alternative (CEQA Section 15126.6(e)). The No Project Alternative provides a comparison between the proposed project and a scenario in which the project site remains in its current condition. Under the No Project Alternative, there would be no recreational rail service between Capitola and Aptos with an extension to Seaside. The freight service would continue on its regular schedule.

#### Impacts and Mitigation Measures

The No Project Alternative would not result in any of the project-related impacts identified in the Initial Study or in this EIR.

Potentially significant impacts associated with the proposed project related to noise and traffic would not occur, and the mitigation measures identified in the Initial Study for this project and in this EIR would not be necessary. The No Project Alternative would not meet the SCCRTC's objectives:

- Provide recreational rail service to tourists and local residents in the Capitola to Aptos/Seaside area through construction of necessary passenger station/platforms and associated infrastructure that would support rail service on an existing railroad line.
- Develop a project that will provide access to, and not conflict with, existing land uses.
- Involve the public and in particular nearby residents, to ensure that the design of the station/platforms is compatible with the surrounding communities.
- Minimize impacts such as pollution, noise, traffic and lighting to the maximum extent feasible.
- Provide a low-impact passenger rail service, which would enable the community to access funds to acquire the railroad right-of-way and preserve a valuable north-to-south transportation corridor; and
- Provide an alternative mode of transportation for visitors consistent with the following *2001 Regional Transportation Plan* policies:

2.5.2 *Encourage private transit service for visitor-serving trips*

2.5.3 *Use the existing rail line for recreational/coastal access to minimize visitor impact on local streets and highways*

### 2. Alternative 2 –Alternative Fuel Alternative

#### Purpose and Description

Under this alternative, the recreational train would run as in either the Original Project or the Business Plan Project Alternative; however, the Alternative would convert a BUDD rail diesel car to run on alternative fuel (e.g., water-diesel-emulsified fuel, biodiesel fuel, ethanol-diesel-emulsified fuels, Fisher-Tropsch fuel, and/or other fuels resulting in reduced environmental impact) rather than diesel fuel.

All of the listed alternative fuels provide a reduction in PM<sub>10</sub> emissions and all but biodiesel reduce NOx emissions. Each is currently being tested by the state to determine practicality, performance and emissions reduction effectiveness. Several commercially available brands of biodiesel, water-diesel-emulsified fuels and ethanol-diesel-emulsified fuels have been tested and verified by the CARB to have emission benefits.

Tests conducted by the California Air Resources Board show that CNG-powered vehicles can provide up to 50 percent reduction in NOx emissions compared with a diesel engine, and up to 40 percent reduction in PM emissions. However, CNG vehicles do have the potential to emit toxic air contaminants similar to diesel engines.

Train refueling would most likely be accomplished one of two ways. The Transit District is constructing a CNG fueling facility as part of their MetroBase project in Harvey West, and portions of this project site are near the rail line and could provide a convenient opportunity for refueling. Alternatively, the trains could be refueled by way of a fueling truck accessing the train within the right-of-way.

The purpose for this alternative would be to reduce environmental impacts associated with the use of diesel fuel. All other potential impacts (noise, hazardous materials, traffic, etc.) would be the same as either the Original Project or the Business Plan Project Alternative.

### **Impacts and Mitigation Measures**

The Alternative Fuel Alternative would result in less air pollutant emissions than the proposed project. Additionally, the potential for a spill of diesel fuel (the fuel source for the proposed project) would be eliminated. All other impacts, including traffic impacts would be the same as the proposed project.

## **D. Environmentally Superior Alternative**

With the successful establishment of a quiet zone along the project corridor and the construction of turning lane improvements at Monterey and Park in Capitola, neither the Original Project nor the Business Plan Project Alternative would result in any potentially significant and unavoidable impacts. Because of its fewer number of trips, the Business Plan Project Alternative would result in fewer air pollutant emissions and noise than the Original Project; however as has already been stated, with the implementation of a quiet zone and the construction of turning lane improvements at Monterey and Park in Capitola, the Original Project would not result in any significant impacts.

The No Project Alternative would avoid any increase in noise, traffic, and air pollutant emissions that would be associated with the proposed project even though, with mitigation, those impacts are not considered significant. However, the No Project Alternative would not meet any of the project objectives.

Alternative 2 (Alternative Fuel) would provide additional reductions in air pollutant emissions under either the Original Project or the Business Plan Project Alternative operating schedule. Because the Business Plan Project Alternative would operate fewer numbers of trips it would result in the least amount of emissions of any of the build alternatives.

Alternative 2 would allow the applicant to meet the project objectives while reducing the environmental effects associated with the proposed project. Of the build alternatives, Alternative 2 would provide the greatest reduction in emissions. Coupled with the establishment of a community quiet zone in which the use of train horns can be discontinued, and intersection improvements in Capitola at Monterey and Park Avenues, Alternative 2 utilizing the Business Plan Project Alternative operating schedule would be considered the environmental superior alternative among the alternatives evaluated, and would achieve the project objectives.